

Applicant: Raymond Bontempi
Application No.: 09/621,894

REMARKS

Claims 1-20 are pending in this application. Claims 1-7, 9, 10, 12, 16, and 17 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,240,073 to Reichman et al. (hereinafter "Reichman") in view of U.S. Patent No. 4,816,825 to Chan et al. (hereinafter "Chan"). Claim 8 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Reichman in view of Chan and in further view of U.S. Patent No. 4,058,672 to Crager et al. (hereinafter "Crager"). Claims 11 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Reichman in view of Chan and in further view of U.S. Patent No. 4,412,326 to Limb (hereinafter "Limb"). Claims 8, 13, 14, and 18-20 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1-3, 6, 7, 10-12, and 14-18 have been objected to based on various informalities. The drawings have also been objected to based on various informalities.

With respect to the claim rejections under 35 U.S.C. § 112, and objections to the claims and drawings, the Applicant has amended the claims and provided proposed drawing amendments to cure the informalities and defects. Therefore, it is respectfully submitted that the rejections and objections have been overcome by the foregoing amendments.

With respect to the claim rejections under 35 U.S.C. § 103(a), the Applicant respectfully disagrees. With respect to claim 1, claim 1 as presently amended, recites classifying messages either as a type-one or a type-two message. If the message is a type-one message, a user directly transmits the type-one message to the communication server and the communication server transmits a copy of the type-one message to all users within at least a subset of system users. If the message is a type-two message, a user transmits a reserve request before transmitting the type-two message to the communication server and the communication server transmits a copy of the reserve request to all other users within said user's subset. The users, upon receipt of the reserve request, refrain

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from upstream transmission for an optimum amount of time. In the claimed invention, users utilize two different methods to access a communication system based on the type of messages, and avoid occurrence of collision.

In Reichman, there is no reservation of communication medium in order to avoid occurrence of collision. In the claimed invention, as mentioned above, a reserve request is transmitted, and upon receipt of the reserve request, users refrain from transmission of messages for a certain period of time. In contrast, Reichman does not disclose a scheme of transmission of a reserve request to keep users from transmitting messages. Reichman simply discloses as follows:

Communication begins in the random access mode by transmitting the TCP messages in the random access frequency sub band. The decision to switch to the channel assignment mode is made in accordance with one of the following criteria:

(See column 10 lines 53-57). Reichman discloses a scheme of transmitting a message in a return link using either a random access mode or a channel assignment mode. Short messages are transmitted using a random access mode, and long messages are transmitted using a channel assignment mode. Communication is always started in a random access mode, and it is switched to a channel assignment mode in certain circumstances. There is no reservation of communication media for long messages before transmission of the messages in Reichman.

Reichman does not disclose a scheme for avoiding occurrence of collision. In Reichman, a short message, such as a connection request, is transmitted to request a radio resource for the sender of the short message, rather than making other users refrain access to communication media, thereby avoiding collision. In the claimed invention, a reserve request is broadcast to at least a subset of a plurality of system users wherein said users refrain from upstream transmission upon receipt

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of the reserve request. In contrast, in Reichman, a short message, such as a connection request, from one user is not known or broadcast to other users, and no user is restricted from transmitting either a short message or a long message when a connection request is received from a user.

Moreover, the claimed invention does not utilize two separate frequency bands for transmission of type-one messages and type-two messages. In contrast, Reichman discloses a scheme of utilizing two separate frequency bands for a random access mode and a channel assignment mode. This presents a problem specifically addressed by the claimed invention, as noted below:

Another asynchronous access control approach is frequency-division multiple access (FDMA) where different frequencies are allocated to each settop terminal. This requires a large reservation of channel bandwidth and is inefficient for terminals that are not transmitting most of the time.

(See page 2 line 30 - page 3 line 2). The claimed invention is directed to one communication medium, and controls access to the communication medium by transmitting a reserve request before transmission of a type-two message and broadcasting the reserve request to let the users know about the request and that they should refrain from accessing the contention-based communication medium for a certain period of time. Therefore, claim 1 is clearly distinguishable from Reichman.

With respect to claims 2-7, 9, 10, 12, and 16, these claims are dependent claims of claim 1. Therefore, it is believed that these claims are allowable for the same reason stated above.

With respect to claims 8, and 11, Crager and Limb are cited as additional references. However, since claims 8 and 11 are dependent on claim 1, and as stated above, the main reference, Reichman is clearly distinguishable from claim 1, it is

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believed that claims 8 and 11 are not obvious over Reichman in view of Chan and Crager or Limb.

With respect to claim 17, claim 17 includes elements similar to that of claim 1. Therefore, as explained above with respect to claim 1, Reichman fails to disclose a scheme of transmitting a reserve request for restricting other user's access to a communication media. In addition, Reichman utilizes two separate frequency bands and does not provide a scheme for avoiding collision by reserving a communication media for a certain period of time for the sender of a reserve request. Therefore, claim 17 is clearly distinguishable from Reichman.

With respect to claim 18, claim 18 recites, among other things, a means for buffering a message and classifying the message as either a type-one or a type-two message, a means for transmitting the buffered message if the message is a type-one message and a reserve request if the message is a type-two message, a means for inducing other settop users upon receipt of the reserve request to refrain from transmitting a message for a certain period of time, and a means for transmitting a copy of the buffered type-two message after the reserve request is broadcast.

As stated above with respect to claims 1 and 17, Reichman fails to disclose a scheme of transmitting a reserve request for restricting other user's access to a communication media, and a scheme for avoiding collision by reserving a communication media for a certain period of time for the sender of the reserve request. In addition, Reichman utilizes two separate frequency bands for transmission of messages. Therefore, claim 18 is also clearly distinguishable from Reichman.

With respect to claims 13, 14, 15, 19, and 20, Applicant has amended these claims as requested by the Examiner.

For the above reasons, Applicant respectfully submits that the presently claimed invention is patentable over the prior art. Reconsideration and allowance of the claims is respectfully requested.

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Respectfully submitted,

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